

**WHAT IS CLAIMED IS:**

1. A method of protecting a cell from damage caused by an overproduction of free radicals, said method comprising administering to said cell a therapeutically-effective amount of a mixture comprising:
  - (a) a lipophilic antioxidant comprising vitamin E, beta carotene, and an extract of *Lycopersicum esculentum*; and
  - (b) a hydrophilic antioxidant comprising vitamin C and an extract of *Vitis vinifera*.
2. The method of claim 1, wherein said mixture further comprises selenium.
3. The method of claim 1, wherein said lipophilic antioxidant comprises:
  - (a) 5 to 20 parts of vitamin E;
  - (b) 1 to 15 parts of beta carotene; and
  - (c) 1 to 4 parts of lycopene in the form of an extract of *Lycopersicum esculentum*.
4. The method of claim 1, wherein said hydrophilic antioxidant comprises:
  - (a) 2 to 60 parts of vitamin C; and
  - (b) 1 to 30 parts of an extract of *Vitis vinifera*.
5. The method of claim 1, wherein said vitamin E is vitamin E acetate or vitamin E succinate.
6. The method of claim 1, wherein said vitamin C is the sodium salt of vitamin C.

7. The method of claim 2, wherein said selenium is sodium selenite or selenium yeast.

8. The method of claim 1, wherein said mixture is administered to a cell in the presence of a pharmaceutically acceptable carrier.

9. The method of claim 8, wherein said pharmaceutically acceptable carrier is selected from the group consisting of natural plant oils, fully or partially hydrogenated plant oils, lecithins, plant phosphatides, and natural waxes.

10. The method of claim 9, wherein said pharmaceutically acceptable carrier is selected from the group consisting of soybean oil, fully or partially hydrogenated soybean oil, rape oil, peanut oil, soylecithin, soyphosphatide, egglecithin, and beeswax.

11. The method of claim 1, wherein said mixture is administered to a cell in the form of a soft or hard gelatin capsule, tablet, coated tablet, suppository, or in the transdermal form.

12. A method of protecting a patient from a disease, or treating a patient suffering from a disease, wherein said disease is caused by an overproduction of free radicals, said method comprising administering to a patient a therapeutically-effective amount of a mixture comprising:

(a) a lipophilic antioxidant comprising vitamin E, beta carotene, and an extract of *Lycopersicum esculentum*; and

(b) a hydrophilic antioxidant comprising vitamin C and an extract of *Vitis vinifera*.

13. The method of claim 12, wherein said mixture is administered to a patient in the presence of a pharmaceutically acceptable carrier.

14. The method of claim 12, wherein said disease caused by an overproduction of free radicals is selected from the group consisting of aging, inflammation, atherosclerosis, and cancer.